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ABSTRACT

Attitudes toward research-based effective teaching behaviors were inventoried to explore differences between teachers, principals, college faculty, and undergraduate education students (N=500). Scores from the Teaching Behaviors Questionnaire (TBQ) were analyzed using analysis of variance and a post hoc comparison procedure. The scores indicated attitudinal support for the research-based behaviors. Differences were found among the groups with secondary and elementary principals scoring significantly higher on the TBQ than the other groups. Elementary teachers scored significantly higher than secondary teachers (the lowest scoring group). Recommendations are made based on the relatively low scores from college education faculty members, the relatively high scores from both elementary and secondary principals, and the discrepancy between the scores of secondary principals and secondary teachers. Sixteen references are included. (Author/JD)

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Attitudes Toward Research-Based Effective Teaching Behaviors from Teachers, Principals, and College Faculties and Students

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Abstract

Attitudes toward research-based effective teaching behaviors from teachers, principals, and college faculties and students

Gregory J. Marchant

Attitudes toward research-based effective teaching behaviors were inventoried to explore differences between teachers, principals, college education faculty members, and undergraduate education students (N = 500). Scores from the Teaching Behaviors Questionnaire (TBQ) were analyzed using analysis of variance and a post hoc comparison procedure. The scores indicated attitudinal support for the research-based behaviors. Differences were found among the groups ($p < .001$) with secondary and elementary principals scoring significantly higher on the TBQ than the other groups. Elementary teachers scored significantly higher than secondary teachers (the lowest scoring group).

Recommendations are made based on the relatively low scores from college education faculty members, the relatively high scores from both elementary and secondary principals, and the discrepancy between the scores of secondary principals and secondary teachers.

Attitudes Toward Research-Based Effective Teaching Behaviors from Teachers, Principals, and College Faculties and Students

This study compared attitudes toward research-based effective teaching behaviors from elementary and secondary teachers, elementary and secondary principals, college education faculty members, and undergraduate education students. Although one study explored teacher preferences for various models of teaching (Thompson, 1981), and a previous study investigated the variables affecting teacher support for research-based effective teaching behaviors (Marchant & Bowers, 1988a), a comparison of attitudes toward research-based effective teaching behaviors from various groups in the field of education had not been conducted.

In previous studies attitude differences had been found between elementary and secondary teachers. Thompson (1981) determined that elementary teachers were more interested in social growth in their students, and secondary teachers were more interested in intellectual and analytical skills. Thompson also found that elementary teachers showed a greater preference for awareness training, social inquiry, and classroom meeting models, and secondary teachers showed a greater preference for the jurisprudential and developmental model.

Jandes, Murphy, and Sloan (1985) compared the perceptions of superintendents, principals, and teachers regarding the effectiveness of their schools. They found that building principals viewed their schools as more effective than did their

teachers. Schools were considered more effective by elementary superintendents, principals, and teachers than their counterparts at the secondary level. These findings were supported by Richardson's (1985) study regarding perceptions of the effective management of student behavior.

In this study the topic considered was the behaviors which research has identified as more effective in producing student achievement. The groups were compared to determine their relative support for these behaviors.

Method

The attitudes of elementary and secondary teachers, elementary and secondary principals, college education faculty members, and undergraduate education students were inventoried using a questionnaire. Analysis of variance and a selected post hoc comparison procedure were used to determine differences.

Subjects

Data were collected from teachers, principals, college education faculty members, and undergraduate education students from Illinois, Indiana, and Wisconsin. After permission was granted from district superintendents, principals were contacted to determine if and how questionnaires could be distributed to their teachers. The questionnaires were distributed during faculty meetings or placed in the teachers' school mailboxes, and

returned from a central office by mail. Of the 1,650 questionnaires distributed to teachers and principals, 940 (57 percent) were returned.

The teacher and principal samples were reduced to closely approximate the percentages reported in the 1986-87 Estimates of School Statistics (National Education Association, 1987). For each state the teacher sample (n = 300) was matched on the variables of gender and level: elementary (kindergarten through sixth grade) and secondary (seventh through twelfth grade). The sample was reduced based on completeness of data, grade level distribution, and distribution of subject matter. Additional questionnaires were eliminated randomly. The principal sample was drawn from the same schools as the teacher sample with some additional area principals also completing questionnaires. The principal sample (n = 100) was matched for elementary (n = 58) and secondary (n = 42) levels for each state.

The college samples were drawn from institutions from the same geographic areas as the teacher and principal samples. College education faculty questionnaires were received from six institutions; student questionnaires were received from four institutions. The undergraduate student sample was taken from undergraduate education methods courses. Of the 350 questionnaires distributed to college education faculties and undergraduate education students, 131 (37 percent) were returned. The college education faculty sample and the undergraduate sample each contained 50 members.

Instrument

The Teaching Behaviors Questionnaire (TBQ) was developed to inventory attitudes toward research-based effective teaching behaviors (Marchant & Bowers, 1988b). The items for the instrument were based on an updated list of "teacher should" statements (cf. Gage, 1978). The "teacher should" statements were taken from the effective teaching research with the teacher behavior and student achievement chapter (Brophy & Good, 1986) of the Handbook of Research on Teaching serving as a primary guide. The 50 item questionnaire used a Likert-type scale of agreement for each item.

Procedure

The data were analyzed to test assumptions of normality and equal variance. This study represented a quasi-experimental design in which group membership could not be randomly assigned. The null hypothesis of no difference among groups was tested using analysis of variance. The data were further tested to determine differences between groups using the Scheffé method of multiple comparisons with $p < .10$ (Scheffé, 1959).

Results

Statistical tests were performed to determine that the necessary assumptions were met for analysis of variance and a post hoc comparison procedure.

The Kolmogorov-Smirnov one sample non-parametric goodness-of-fit test indicated that the cumulative distribution of the TBQ scores displayed a significant relationship with a normal distribution of the scores ($p < .05$). Bartlett's Box F test of homogeneity indicated that the variances were relatively equal. An analysis of variance indicated that a significant difference did exist among the groups (see Table 1).

Insert Table 1

about here

The Scheffé multiple comparison test identified differences among the different groups (see Figure 1). The multiple comparison procedure indicated that the groups of principals had scored higher on the TBQ than the other groups. The multiple comparison procedure also indicated a difference between the group of elementary teachers and the group of secondary teachers. The score means were distributed as indicated in Table 2.

Insert Figure 1

and Table 2

about here

Discussion

Entering into this study I anticipated that college education faculty members might score the highest on the TBQ, and that undergraduate education students might score the lowest. Education faculty members should be closest to the research and the students should just be gaining exposure to the research and have little or no experience from which to draw. I also anticipated that classroom teachers might score higher than principals. Classroom teachers are constantly exhibiting teaching behaviors. Principals are removed from the teaching environment due to numerous administrative duties, many of which have little to do with the actual practice of effective teaching. I anticipated incorrectly.

Low Scores for Higher Education

Research has provided insight into some behaviors for improving teaching. In order for teachers to gain an awareness and support for these behaviors, they should be exposed to information regarding the research-based effective teaching behaviors. The question is, how will education students and practicing teachers acquire information about these behaviors and develop the skills to implement them?

Unfortunately, the results of the TBQ scores for college education faculty suggested that there may be a problem related to their dedication to lead the way in introducing research-based

effective teaching behaviors to their students. College education faculty support for the research-based behaviors was not significantly higher than that of the undergraduate education students, or secondary teacher (the lowest group).

In 1985 Haberman made "51 Predictions Regarding Teacher Education"; one of his predictions was (p. 57):

> Teacher-preparing institutions will continue to ignore the research bases for their policies and curricula, and will continue the practice of developing teacher education programs based on university politics (ie., by faculty vote of faculty unburdened by data).

The results of the TBQ from college faculty seemed to support Haberman's prediction.

If teacher education programs are going to meet the needs of teachers, many of them are going to have to change their orientations. College faculty members tend to be more abstract, idealistic, and subject matter oriented, whereas teachers and principals are more interested in behavioral classroom oriented skills (Post, Ward, & Willson, 1977; Willson & Horn, 1979; and Tulloch, 1986). College education faculties that fail to support, or at least address, research-based effective teaching behaviors are neglecting the needs of teachers and future teachers, and are missing an opportunity to provide a more professional foundation to the occupation of teaching.

The Role of the Principal

Both elementary and secondary school principals were the greatest supporters of the research-based effective teaching behaviors. This lends credibility to the validity of these behaviors for secondary instruction. It emphasizes the role that principals should play as instructional leaders, and it provides a vehicle for the implementation of the behaviors.

The group scoring the highest on the TBQ was the secondary principals. This suggested that secondary principals support these behaviors, and probably look for these behaviors from their teachers. This result indicated that the research-based behaviors are valid and generalize to the secondary level.

Although there is continuing evidence that principals are not accurate judges of effective teacher performance (Medley & Coker, 1987), this study indicated that they have an idea of what are effective teaching behaviors. The format of most teacher evaluation programs makes objective judgements of effective teaching difficult. The inherent structural flaws in the measures should not be mistaken with the content matter of that which is being evaluated. Principals seem to hold relatively accurate views on the effectiveness of various teaching behaviors. They out scored all other groups on the TBQ. This implies, at least on paper, that principals are better judges than teachers or college education faculty members as to which teaching behaviors might be more effective in producing student achievement. This suggests that although principals have

difficulty in objectively evaluating teachers, they should have a voice in what is to be evaluated.

As the role of teachers expands, as suggested in reform reports such as the Carnegie and Holmes Reports (Carnegie Forum, 1986; Holmes Group Executive Board, 1986), the principal's role in the instructional and pedagogical development of the teachers should also expand. The principal is in a unique situation to impact teachers on a very specific level. Not only can the principal provide general direction for effective teaching, but specific applications can be considered. Teachers, especially secondary teachers, need more than to be told what the research says are effective teaching behaviors. Teachers also need to know how to remove the impediments inherent in their particular situation. Principals not only support the research findings, but they are also in a position to know the teachers' specific classroom situation.

Although principals hold this potential, it is clear that they have not been totally successful in their ability to implement procedures to improve teaching. The greatest discrepancy between groups on the TBQ was between secondary principals and secondary teachers. This suggested that, while principals were in agreement with the research, they were not in total agreement with their teachers. Principals and teachers need to find a way to bridge this gap. Consideration should be given to providing in-service programs connected to ongoing evaluation procedures.

Concluding Statement

Research can provide a strong basis for educational practice. While the results of research should not be blindly accepted; neither should they be ignored. The results of the effective teaching research have provided direction for educators.

This study has demonstrated that support for these results can be inventoried and used for comparisons. The results of these comparisons yielded cause for concern and provided some direction. Concerns arose from the relatively low level of support from college education faculties, and from the discrepancy between secondary principals and their teachers. Colleges need to work with their students to develop these behaviors, and principals need to work with their teachers to help them to appropriately apply the research-based behaviors in their classrooms.

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Table 1

Analysis of variance table

Source	df	Sum of Squares	Mean Squares	F
Groups	5	3036.80	607.36	11.09 ***
Within	494	27046.50	54.75	
Total	499	30083.30		

Note. *** $p < .001$

Table 2

TBQ score means and standard deviations

Group	n	M	SD
Secondary principals	42	120.91	7.34
Elementary principals	58	119.14	6.88
Elementary teachers	177	115.73	7.44
College faculty	50	114.44	8.02
Undergraduate students	50	113.56	6.43
Secondary teachers	123	112.97	7.70
Total	500	115.54	7.77

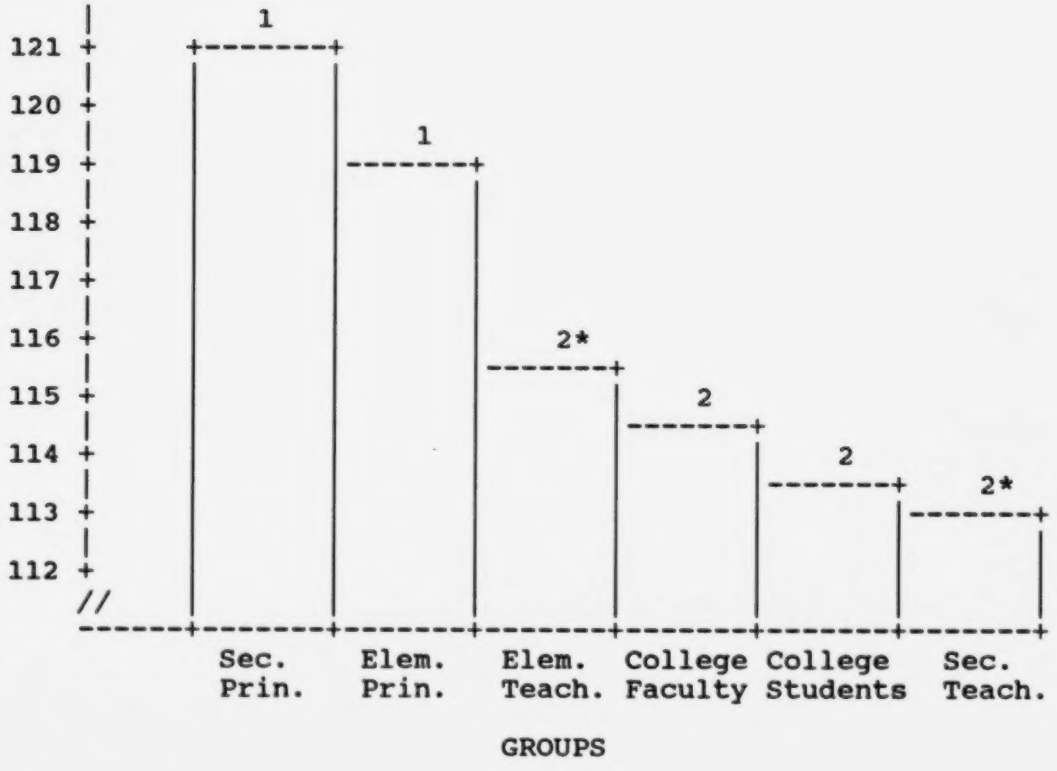

Figure 5. TBQ score means by group. Groups with the number 1 were significantly different from the groups with the number 2, and * indicates a difference between the elementary and secondary teacher groups. Differences are indicated with $p < .10$ as determined by the Scheffe method of multiple comparisons.